

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,534	12/02/2004	Wolfgang Hahn	449122078200	4504
25227 7590 MORRISON & FO			EXAM	INER
1650 TYSONS BO			NGUYEN, SIMON	
SUITE 300 MCLEAN, VA 22102		•	ART UNIT	PAPER NUMBER
11100001111, 111100		·	2618	
		•	•	. •
SHORTENED STATUTORY PE	ERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONTE	16	01/19/2007	PAF	FR

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Application No.	Andicontic
Office Action Summany		Application No.	Applicant(s)
		10/516,534	HAHN ET AL.
	Office Action Summary	Examiner	Art Unit
		SIMON D. NGUYEN	2618
Period fo	The MAILING DATE of this communication a or Reply	ppears on the cover sheet with the	correspondence address
WHIC - External after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REP CHEVER IS LONGER, FROM THE MAILING nsions of time may be available under the provisions of 37 CFR of SIX (6) MONTHS from the mailling date of this communication. Operiod for reply is specified above, the maximum statutory perior re to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mail and patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATIO  1.136(a). In no event, however, may a reply be ti  d will apply and will expire SIX (6) MONTHS fron tte, cause the application to become ABANDON	N. mely filed in the mailing date of this communication. ED (35 U.S.C. § 133).
Status			
2a) <u></u>	Responsive to communication(s) filed on <u>02</u> This action is <b>FINAL</b> . 2b) The Since this application is in condition for allow closed in accordance with the practice under	is action is non-final. ance except for formal matters, pr	
Dispositi	on of Claims		
5) □ 6) □ 7) ☒ 8) □ <b>Applicati</b> 9) □ 10) ☒	Claim(s) 1-26 is/are pending in the application 4a) Of the above claim(s) is/are withdred Claim(s) is/are allowed.  Claim(s) is/are rejected.  Claim(s) 1-26 is/are objected to.  Claim(s) are subject to restriction and on Papers  The specification is objected to by the Examination The drawing(s) filed on 02 December 2004 is applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examination of the oath or declaration of the oath of the oath or declaration of the oath of	awn from consideration.  for election requirement.  her.  fare: a)⊠ accepted or b)□ objected or by □ object	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).
Priority u	ınder 35 U.S.C. § 119		
12) <u> </u>	Acknowledgment is made of a claim for foreignal All b) Some * c) None of:  1. Certified copies of the priority documents.  2. Certified copies of the priority documents.  3. Copies of the certified copies of the prince application from the International Burestee the attached detailed Office action for a list	nts have been received. nts have been received in Applicat ority documents have been receiv au (PCT Rule 17.2(a)).	ion No ed in this National Stage
2) 🔲 Notic 3) 🔯 Inforr	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1-3, 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Dynarski et al. (6,466,571).

Regarding claims 1 and 23, Dynarski discloses a method for authenticating a subscriber for utilizing services in a wireless LAN while using an IP multimedia subsystem of a mobile radio network (abstract, fig.1, column 3 lines 50-62, column 5 lines 20-35), comprising: receiving an IP address from the wireless LAN (an IP address assigned, abstract), after which the subscriber receiving the IP address is authenticated to the IP multimedia subsystem (a network access server, IWU) while giving the IP address, by means of SIP registration (a table of mapping IP address stored in an authentication server); and informing an element of the wireless LAN (home agent) of the result of the authentication of the subscriber with regard to the IP multimedia system (abstract, column 2 lines 33-65, column 3 lines 4-47).

Application/Control Number: 10/516,534

Art Unit: 2618

Regarding claim 2. Dynarski further discloses wherein the subscriber of the wireless LAN in the IP multimedia subsystem is authenticated while using a home subscriber system (home agent) (abstract).

Page 3

Regarding claim 3. Dynarski further discloses using an authentication server (abstract).

3. Claims 1, 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakajima (2003/0169714).

Regarding claims 1, 23, Nakajima discloses a method for authenticating a subscriber for utilizing services in a wireless LAN while using an IP multimedia subsystem of a mobile radio network (abstract, figs.1-6), comprising: receiving an IP address from the wireless LAN after which the subscriber receiving the IP address is authenticated to the IP multimedia subsystem while giving the IP address, by means of SIP registration; and informing an element of the wireless LAN of the result of the authentication of the subscriber with regard to the IP multimedia system (abstract, paragraphs 5-12, 27, 36-40).

4. Claims 1-7, 10-16, 18-19, 21, 23-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Saunders et al. (2004/0152446).

Regarding claim 1, Saunders discloses a method for authenticating a subscriber for utilizing services in a wireless LAN while using an IP multimedia subsystem of a mobile radio network (abstract, figs.1-4), comprising: receiving an IP address from the

Art Unit: 2618

wireless LAN (paragraph 46), after which the subscriber receiving the IP address is authenticated to the IP multimedia subsystem while giving the IP address, by means of SIP registration (paragraphs 48-49); and informing an element of the wireless LAN of the result of the authentication of the subscriber with regard to the IP multimedia system (abstract, paragraphs 46-51, figs.1-4).

Regarding claim 2. Saunders further discloses wherein the subscriber of the wireless LAN in the IP multimedia subsystem is authenticated while using a home subscriber system (#50 including address allocation and session register which is obviously to be used in a home subscriber system. Furthermore, the authentication server directly connected to access server 60 prior to connect to WAP gateway 20).

Regarding claim 3, Saunders further using an authentication server (#50 of fig.1-3).

Regarding claim 4, Saunders further discloses wherein the subscriber transmits, via the wireless LAN, an SIP register message to a device of the IP multimedia system, which transmits a request for authentication of the IP multimedia subsystem subscriber to the home subscriber system after which the home subscriber system authenticates the subscriber and communicates the result of the authentication to the wireless LAN access gateway (figs. 2-3).

Regarding claim 5, Saunders further discloses, wherein an association is implemented between the subscriber terminal and the wireless LAN transmitting and receiving via the radio interface between subscriber and wireless LAN (fig.2-4).

Application/Control Number: 10/516,534

Art Unit: 2618

Regarding claim 6, Saunders further discloses wherein the subscriber terminal receives the IP address from an address area of the wireless LAN with which--together with other IP transport-based data transmits and receives SIP messages that transport authentication messages from and to the IP multimedia subsystem (figs. 2-4).

Regarding claim 7, Saunders further discloses wherein access to services is controlled via the wireless LAN access gateway (#20), which monitors successful authentication in the IP multimedia subsystem (paragraphs 6-11, 41, 46-47).

Regarding claims 10-11, 13-14, Saunders further discloses, the result of the authentication is fed to a wireless LAN access gateway by a proxy-call state control function/policy control function at a location having wireless LAN coverage and forwards the SIP messages to a corresponding entity in the IP multimedia subsystem and controls the WLAN access gateway with regard to the authentication result of the IP multimedia subsystem (paragraphs 38-42, figs. 2-4) and the data traffic is to be handled by the gateway (paragraphs 6-11)

Regarding claims 12, Saunders further discloses wherein instructions are provided to the WLAN access gateway based on a result of the authentication in the IP multimedia subsystem as to how data traffic of a subscriber is to be handled by the wireless LAN access gateway (paragraphs 6-11).

Regarding claims 15-16, Saunders further discloses wherein the result of the authentication is fed to the wireless LAN access gateway by the call state control function/policy control function in the IP multimedia subsystem and wherein the call state control function node of the IP multimedia subsystem controls the wireless LAN

Art Unit: 2618

access gateway with regard to the authentication result of the IP multimedia subsystem (paragraphs 6-11, 38-42, fig. 2-4).

Regarding claim 18, Saunders further discloses an authentication result is evaluated by expanded functionalities in the wireless LAN access gateway (paragraphs 7, 12).

Regarding claim 19, Saunders further discloses the WLAN access gateway converts (the gateway translates between protocols) the IP data, which allows subscriber data to pass there through (paragraph 3).

Regarding claim 21, Saunders further discloses wherein the subscriber of the wireless LAN is also a subscriber of the mobile communication network (abstract, fig.2-3).

Regarding claims 23, this claim is rejected for the same reason as set forth in claim 1.

Regarding claims 24-26, Saunders discloses wherein a second device (access server 50) constituting the proxy call state control function node is a node in the wireless LAN and wherein the second device constituting the proxy call state control function node of the IP multimedia subsystem is provided for controlling authentication in the wireless LAN (paragraphs 38-42) and wherein the wireless LAN access gateway has a third device (WAP gateway 20) that is configured such that the device converts the authentication result, which is received from the IP multimedia subsystem by allowing subscriber data to pass there through (paragraph 3, figs.2-3).

## Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 8, 9, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saunders et al. (2004/0152446) in view of Ejzak (2003/0027595).

Regarding claims 8, 9, 17, Saunders does not specifically disclose interface coupled between the networks.

Ejzak discloses an inter-network system in which a wireless LAN is connected to the IP multimedia subsystem via a Gi interface, an Mm interface, and an interface is installed between the call state control function node of the IP multimedia subsystem and the wireless LAN access gateway for protected data transfer (paragraphs 20, 32, 36, 40-41, 46, 49, 50, 72-78, fig.1). therefore, it would have been obvious to one skilled in the art at the time the invention was made to have Saunders, modified by Ejzak to make sure each component in the IP media system functioned as expected in order to generate a good outcome.

7. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saunders et al. (2004/0152446) in view of Mao (2004/0243710).

Regarding claim 20, Saunders does not specifically disclose an application layer gateway.

Application/Control Number: 10/516,534

Art Unit: 2618

Mao discloses an IP communication in which an application layer gateway is used. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have Saunders, modified by Mao in order to securely exchange the data.

8. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saunders et al. (2004/0152446) in view of Christoffel et al. (2002/0136226).

Regarding claim 20, Saunders does not specifically disclose the network can be used with aid of ETSI HiperLan and IEEE 802.11.

Mao discloses an IP communication in which the network can be used with aid of ETSI HiperLan and IEEE 802.11 (paragraph 62) in the authentication of the IP address (paragraphs 65, 94-97). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have Saunders, modified by Christoffel to securely exchange the data in order to improve the system performance.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon Nguyen whose telephone number is (571) 272-7894. The examiner can normally be reached on Monday-Friday from 7:00 AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban, can be reached on (571) 272-7899.

Page 8

Art Unit: 2618

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 306-0377.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

600 Dulany, Alexandria, VA 22314

Or faxed to:

(571) 273-8300 (for formal communications intended for entry)

Hand-delivered response should be brought to Customer Service Window located at the Randolph Building, 401 Dulany, Alexandria, VA, 22314.

Simon Nguyen

January 16, 2007

SIMON NGUYEN
PRIMARY EXAMINER